2019 Iowa Gambling Treatment Outcome System

Administrative Data and Treatment Outcome Report

Prepared for
Iowa Department of Public Health
Iowa Gambling Treatment Program

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List of Acronyms

IDPH .... Iowa Department of Public Health

IGTP .... Iowa Gambling Treatment Program

IGTO .... Iowa Gambling Treatment Outcomes

I-SMART .... Iowa Service Management and Reporting Tool

IPN .... Integrated Provider Network

SAMHSA .... Substance Abuse and Mental Health Services Administration

IRB .... Institutional Review Board

UNI .... University of Northern Iowa

CSBR .... Center for Social and Behavioral Research

SECTION A. ADMINISTRATIVE DATA

The 2020 Iowa Gambling Treatment Outcomes (IGTO) Monitoring System report presents findings based on data from the Problem Gambling Domain of the Iowa Service Management and Reporting Tool (I-SMART), which is the main data source for this report. In addition, a six-month follow-up assessment after discharge has been collected by the CSBR research team since January of 2018. This report uses the I-SMART data from January 1, 2019, to December 31, 2019.

The purpose of the Iowa Gambling Treatment Outcomes Monitoring System is to assess the extent to which problem gambling treatment services provided via the Office of Problem Gambling Treatment and Prevention are associated with positive outcomes for patients who received problem gambling treatment from the Integrated Provider Network (IPN).

The Iowa Department of Public Health (IDPH) Substance Use and Problem Gambling Services Integrated Provider Network (IPN) is a statewide, community-based, resiliency- and recovery-oriented system of care for substance use and problem gambling services (prevention, early intervention, treatment, and recovery support).

The IPN brings together three previously separate service systems: Substance Abuse Prevention, Substance Use Disorder Treatment, and Problem Gambling Prevention and Treatment, as directed in legislation beginning in 2009. IPN problem gambling services are funded by state General Fund appropriations.

The IGTO project focuses on problem gambling treatment and follow up data, and has been reviewed by the Institutional Review Board (IRB) at UNI to ensure compliance with human participant research protections.

CRISIS, PLACEMENT, AND ADMISSION PROCESS AND NUMBER OF PATIENTS

From January 2019 to December 2019, there were 176 assessments completed. More specifically, 8 patients had only a "crisis" assessment completed, 42 patients had only a "placement" assessment completed, while 8 patients completed both a "crisis" and "placement" assessment. One hundred twelve patients completed both "placement" and "admission" assessment, while 6 patients completed all three types of assessments (see Figure A.1). Among the 118 admissions, there were 5 patients who had previous admission in 2019; consequently, there were 113 unique patients served in 2019. However, the number of patients served in the treatment programs is higher since some they have had more than one admission in this period. Also, individuals such as significant others or family members are not counted in this report.

Figure A.1. *Processes and number of patients in the I-SMART system in 2019*
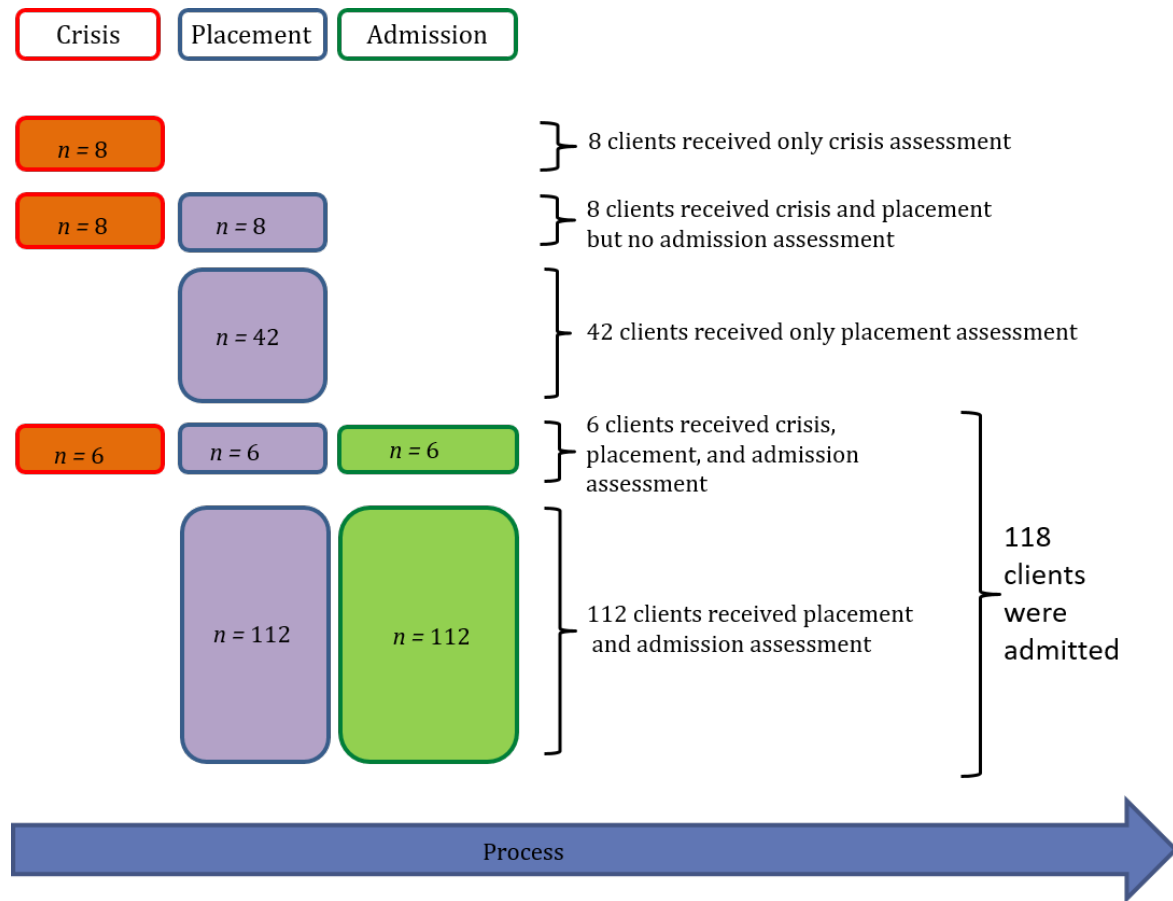
ADMISSIONS BY TREATMENT PROGRAM

The number of admitted patients varied by program, ranging from 0 to 14. IPN agencies with at least one admitted patient are shown in Table A.1.

Table A.1. *Admissions by treatment program*

	State Business Number (SBN)				
	SBN=3	SBN=4	SBN=5	SBN=15	SBN=20
Patients	n=9	n=10	n=3	n=14	n=12
	SBN=21	SBN=23	SBN=24	SBN=25	SBN=26
Patients	n=14	n=4	n=1	n=3	n=14
	SBN=30	SBN=31	SBN=34[1]	SBN=36	SBN=40
Patients	n=1	n=9	n=2	n=9	n=13

[1] The State Business Number=34 is an agency which provided gambling treatment services, but is not part of the IPN.

WAIT TIME

Wait time is computed using the number of days from date of first contact to admission. Of the 118 patients who were admitted in 2019, the average wait time was 8.4 days and 79% of admitted patients waited for 14 or fewer days.

Figure A.2. *Number of patients by wait time until admission, Year 2019*
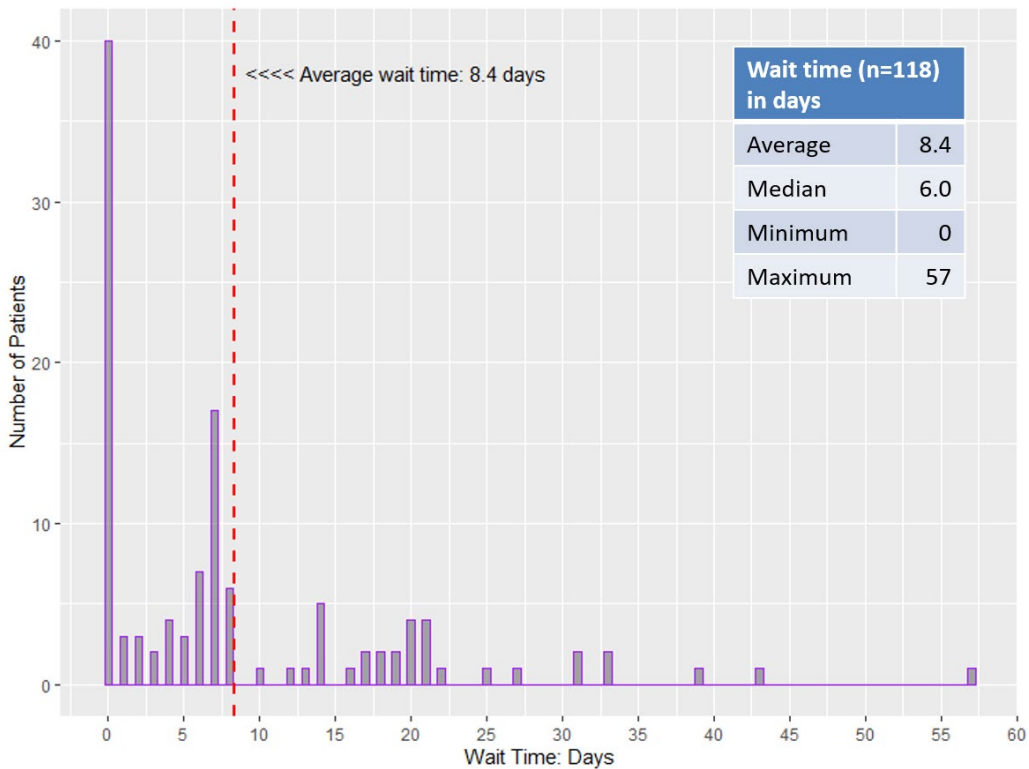
ADMISSION, 30-DAY ASSESSMENT, DISCHARGE AND 6-MONTH FOLLOW-UP

There were 118 patients who were admitted and received services from January 2019 to December 2019. Of these, 47 completed a 30-day follow-up assessment. Starting in 2019, the six-month follow-up questionnaire was assessed 6 months after the admission date regardless of discharge status. In 2019, 25 patients completed the 6-month follow-up; 17 of these patients had a discharge status, and eight patients continued in the treatment program. Overall, 72 patients had a discharge status while 46 continued in a treatment program (see Figure A.3).

Figure A.3. *Process and number of patients in 2019*
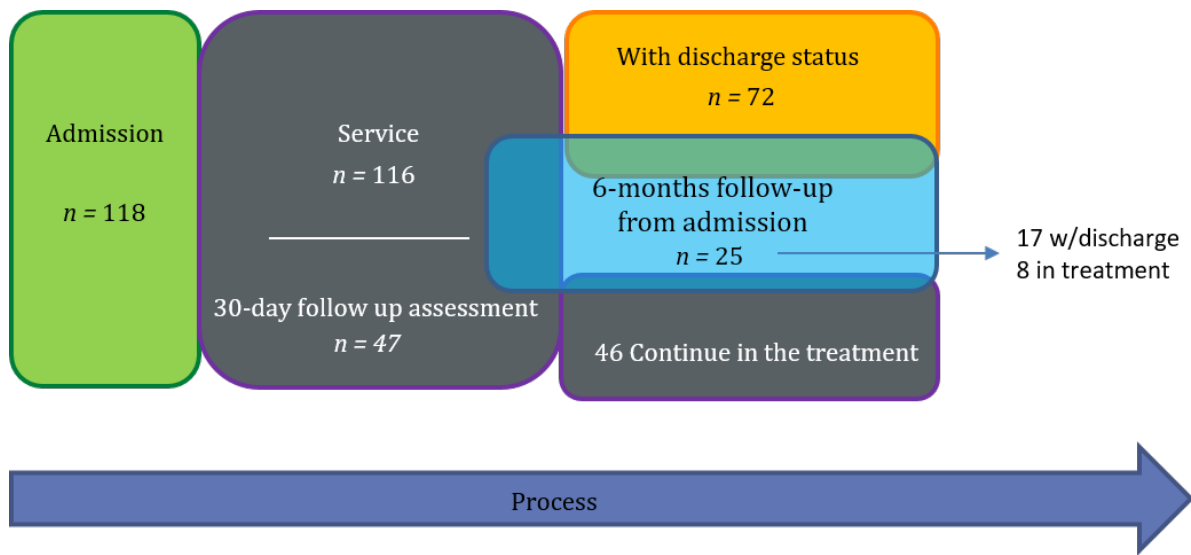
SIX-MONTH FOLLOW-UP

During the placement screening process, patients are asked if they would agree to complete follow-up questionnaires six months from admission. This follow-up questionnaire mirrors the placement screening and admission data set, plus additional questions on perception of the treatment experience (See Table A.2).

Table A.2. *Admissions and number of follow-up assessments by treatment program*

	State Business Number (SBN)				
	SBN=3	**SBN=4**	**SBN=5**	**SBN=15**	**SBN=20**
Admission	n=9	n=10	n=3	n=14	n=12
Six-month FU	n=2	n=6	n=0	n=2	n=4
	SBN=21	**SBN=23**	**SBN=24**	**SBN=25**	**SBN=26**
Admission	n=14	n=4	n=1	n=3	n=14
Six-month FU	n=5	n=1	n=1	n=0	n=0
	SBN=30	**SBN=31**	**SBN=34**	**SBN=36**	**SBN=40**
Admission	n=1	n=9	n=2	n=9	n=13
Six-month FU	n=0	n=2	n=0	n=1	n=1

DEMOGRAPHIC CHARACTERISTICS OF PATIENTS AT ADMISSION

More males (54%) than females (46%) were admitted. The clear majority of the patients were white (93%). Patients were less likely to have a college education (41%) and more likely to be unemployed (58%) at admission compared to the Iowa adult population (see Table A.3).

Table A.3. *Demographics of patients in I-SMART & 6-month follow-up compared to IA population.*

	Admission (n=118)	Iowa adults[2]
Gender		
Male	54%	49%
Female	46%	51%
Ethnicity		
No Hispanic/Latino	97%	95%
Race		
Caucasian	93%	93%
African American	3%	3%
Other	4%	4%
Relationship[3]		
Single	43%	28%
Married or cohabitating	31%	53%
Divorced, separated, or widowed	26%	19%
Education		
High school or GED or less	59%	36%
Some college or more	41%	64%
Employment status[4]		
Full/part time	42%	68%
Unemployed or unable to work	58%	32%
Age group		
18-30 years	20%	22%
31-50 years	44%	31%
51 or more	36%	47%

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[2] Iowa adult (18 years and older) estimates are based on 2017 Current Population Survey March Supplement.
[3] Iowa adult estimates based on population aged 15 and older.
[4] Iowa adult estimates based on population aged 16 or older (see https://www.census.gov/quickfacts/fact/table/IA).

SECTION B. TREATMENT OUTCOMES

Treatment outcomes in this section focused on the following:

- Wait time, length of services and discharge reason
- Treatment services
- Paired analyses between admission and discharge

OUTCOME 1: WAIT TIME

WAIT TIMES AND LENGTH OF SERVICE

In 2019, 118 patients were admitted and 72 patients had a discharge reason specified. The average wait time for treatment was 8.4 days among admitted patients. The following findings reflect the group of patients who have <u>both</u> admission and discharge records (n=72). Those patients who did not have a discharge noted (n=46) continue to participate in treatment and are not part of this outcome analysis.

Length of service (LOS)[5] was compared between those who waited less than a week and those waiting more than a week to be admitted. Although patients admitted within a week received more services, this difference was not statistically significant (Table B.1 shows the sample average in treatment services).

Table B.1. *Wait times by length of service (LOS)*

Wait times		Service count	Service time (minutes)
0-7 days (n=53)	Average	11.8	588
	Minimum	2	60
	Maximum	92	1980
8 or more days (n=19)	Average	8.8	474
	Minimum	2	90
	Maximum	33	1980
Total (n=72)	Average	11.0	558
	Minimum	2	60
	Maximum	92	1980

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[5] LOS can be assessed in two ways: 1) Aggregated count of number of services by patients, and 2) Aggregated length of time of services received by patients.

WAIT TIMES AND DISCHARGE REASON[6]

The average wait time for patients who completed the treatment was 7.6 days and was slightly longer than the wait time among those who did not complete treatment (7.3 days). However, this difference was not statistically significant (see Table B.2).

Table B.2. *Wait times by discharge reason*

| Wait times (days)	Complete treatment plan (n=24)	Incomplete treatment plan (n=48)
Average	7.6	7.3
Minimum	0	0
Maximum	31	43

OUTCOME 2: TREATMENT SERVICES

In this section, associations between treatment services and main outcomes of problem gambling treatment are examined. The findings are based on the group of patients who have both admission and discharge records (n=72).

Discharge reason is given at the time of completion of a treatment plan (33%) or when it is necessary to close the patient's file for different reasons (67%) such as "client left" or "referred outside." The "completed treatment" includes: 1) Completed the treatment plan, or 2) Substantially completed treatment plan. The "incomplete treatment" includes: 1) Client left, 2) Death, 3) Incarcerated, 4) Lack of progress, or 5) Referred outside.

SERVICES RECEIVED (REGARDLESS OF DISCHARGE REASON)

Among those patients who were discharged, more than 2 in 3 (69%) received four or more services while in treatment. About 3 in 10 patients received nine or more services before discharging from services (see Figure B.1).

**Figure B.1.** *Services received before discharge from services*

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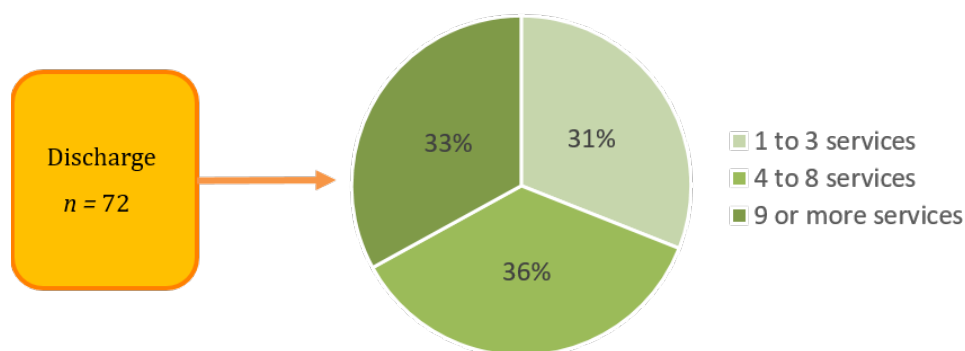
[6] Discharge reason is defined as follows in the report: 'Completed treatment' or 'Substantially completed' were aggregated into "Complete." 'Client left', 'Death', 'Incarcerated', 'Lack of progress', and 'Referred outside' were aggregated into "Incomplete."
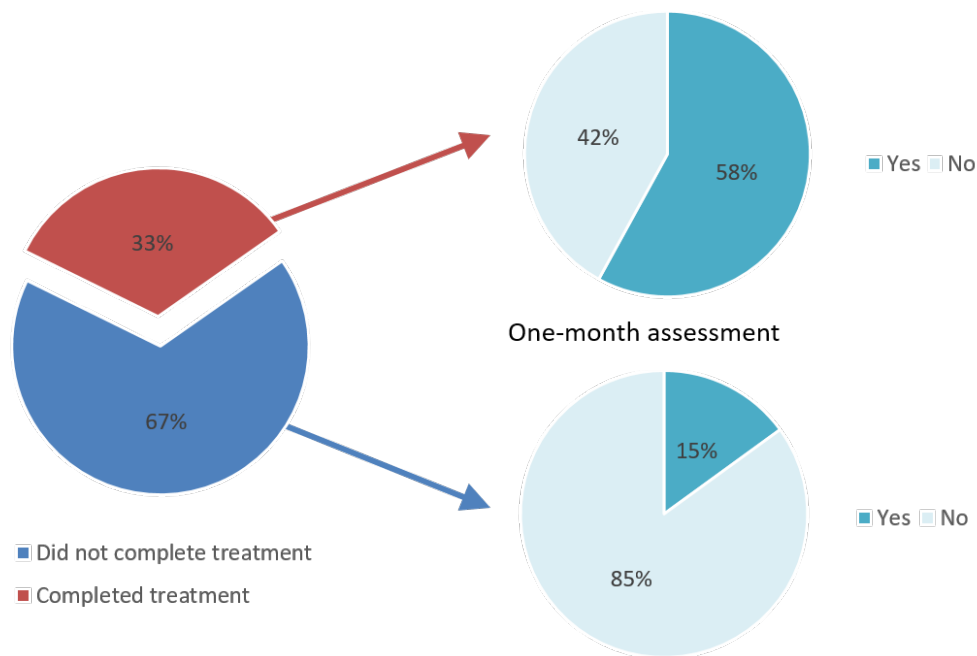
30-DAY FOLLOW-UP

About 3 in 10 of discharged patients participated in the 30-day follow-up (n=21) (see Figure B.2).

Figure B.2. *Thirty-day follow-up received before receiving discharge reason*
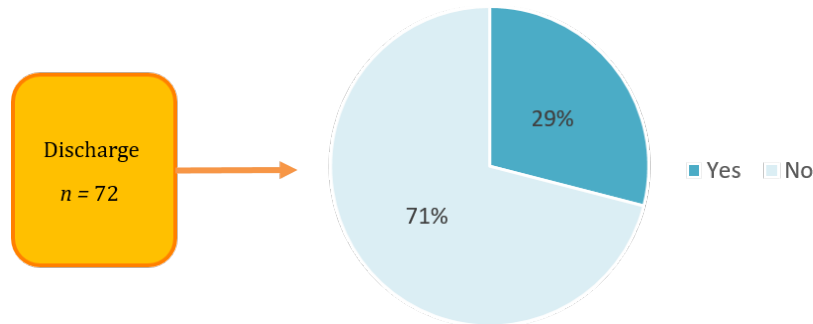
The proportion of 30-day follow-ups was significantly different between patients who completed (n=24) and who did not complete (n=48) treatment as shown in Figure B.3. Among those who completed treatment, 58 % of patients had 30-day follow-ups. However, this percent is based on 14 patients only (see Figure B.3).

Figure B.3. *Thirty-day follow-ups received among patients discharged from services*

The length of time between admission and 30-day follow-up varies greatly. The time of assessment ranged from 14 days to 75 days from admission date. The most common interval between admission and a 30-day follow-up assessment was 35 days. Among those who were assessed with 30-day follow-up, about half of patients (52%) were between 31 to 45 days since admission.

FOUR OR MORE TREATMENT SERVICES WITHIN 30 DAYS AND LENGTH OF SERVICE
Patients who received four or more services within the first 30 days of admission were more likely to have a higher number and duration (total hours of services) of treatment sessions compared to those who received fewer than four treatment services within 30 days of admission (see Table B.3).

Table B.3. *Treatment services by number of services received within 30 days*

Treatment services	Within 30 days	
	Fewer than 4 services (n = 39)	4 or more services (n = 33)
Average number of sessions[7]	6.7	16.2
Average LOS time[8]	3.7 hours	15.9 hours

*p < .01

OUTCOME 3: ADMISSION AND DISCHARGE: PAIRED SAMPLE (N=24)

AVERAGE NUMBER OF DAYS GAMBLED IN THE PAST 30 DAYS
In 2019, there were 24 patients who completed treatment. Among these patients, the number of days gambled in the past 30 days at the time of discharge was fewer than at the time of admission (see Table B.4 and Figure B.4).

Table B.4. *Average number of days gambled among discharged patients*

Time of assessment	Average number of days gambled in the last 30 days (n = 24)
Admission	4.8
Discharge	1.3

*p < .05

[7] The average number of "sessions" do not include Coordination of Care and Recovery Support Services (RSS).
[8] The average number of LOS does not include Coordination of Care and Recovery Support Services (RSS).

PSYCHOSOCIAL INDICATORS IN THE PAST 30 DAYS
There are nine psychosocial indicators assessed at admission and discharge. Patients (n = 24) reported a decline in all indicators (see Figure B.4).

Figure B.4. *Psychosocial indicators at admission and 30-day follow-up*
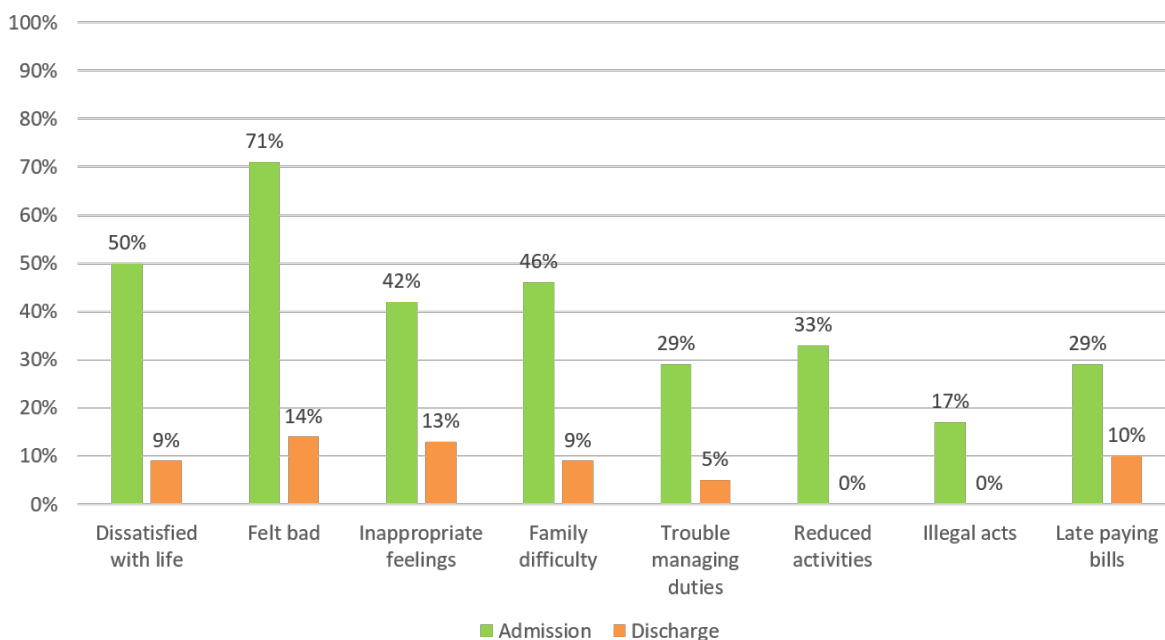
SECTION C. SIX-MONTH FOLLOW-UP

COMPARING PATIENTS' DEMOGRAPHICS, DISCHARGE STATUS, AND LENGTH OF SERVICE
Starting in 2019, the follow-up data are based on an assessment 6 months from admission. Therefore, some patients who completed the questionnaire are still in a treatment program. Thus, the follow-up data are based on admissions in the first 6 months of 2019. The results of this section should be taken with caution since the number of patients is low.

Demographic characteristics reported on the I-SMART Admission assessment and the 6-month follow-up samples are shown below. The demographic characteristics of respondents in 6-month follow-up were more likely to be married, have had some college education, and be older compared to the patients at admission in 2019.

Table C.1. *Demographics of patients in admission and 6-month follow-up samples*

	Admission (n=118)	6-month follow-up (n=25)
Gender		
Male	54%	48%
Female	46%	52%
Ethnicity		
No Hispanic/Latino	97%	100%
Race		
Caucasian	93%	100%
African American	3%	0%
Other	4%	0%
Relationship		
Single	43%	32%
Married or cohabitating	31%	40%
Divorced, separated, or widowed	26%	28%
Education		
High school or GED or less	59%	44%
Some college or more	41%	56%
Employment status		
Full/part time	42%	52%
Unemployed or unable to work	58%	48%
Age group*		
18-30 years	20%	8%
31-50 years	44%	24%
51 or more	36%	68%

SATISFACTION WITH TREATMENT

Of the patients who responded to the 6-month follow-up assessment, 56% rated the program as "excellent" while 44% of participants stated that their satisfaction with the services received so far was either good, fair, or poor (see Table C.2).

Table C.2. *Discharge status by rating of treatment*

Treatment rating	Total (n=25)		Completion of treatment					
			Incomplete (n=12)		Complete (n=5)		Still in treatment (n=8)	
	n	%	n	%	n	%	n	%
Excellent	14	56%	6	50%	4	80%	4	50%
Good, fair, poor	11	44%	6	50%	1	20%	4	50%

PSYCHOSOCIAL INDICATORS AT ADMISSION AND 6-MONTH FOLLOW-UP

There were 25 patients who completed assessments at admission and 6-month follow up. The nine psychosocial indicators across assessments are shown below (see Figure C.2). They are based on these matched patients in admission and 6-month follow up (n=25). Although the number of patients that could be assessed across the time is not robust, the frequency of the indicators show consistency with measures shown in the previous part of the report.

Figure C.1. *Psychosocial indicators in the past 30 days at admission and 6-month follow-up.*
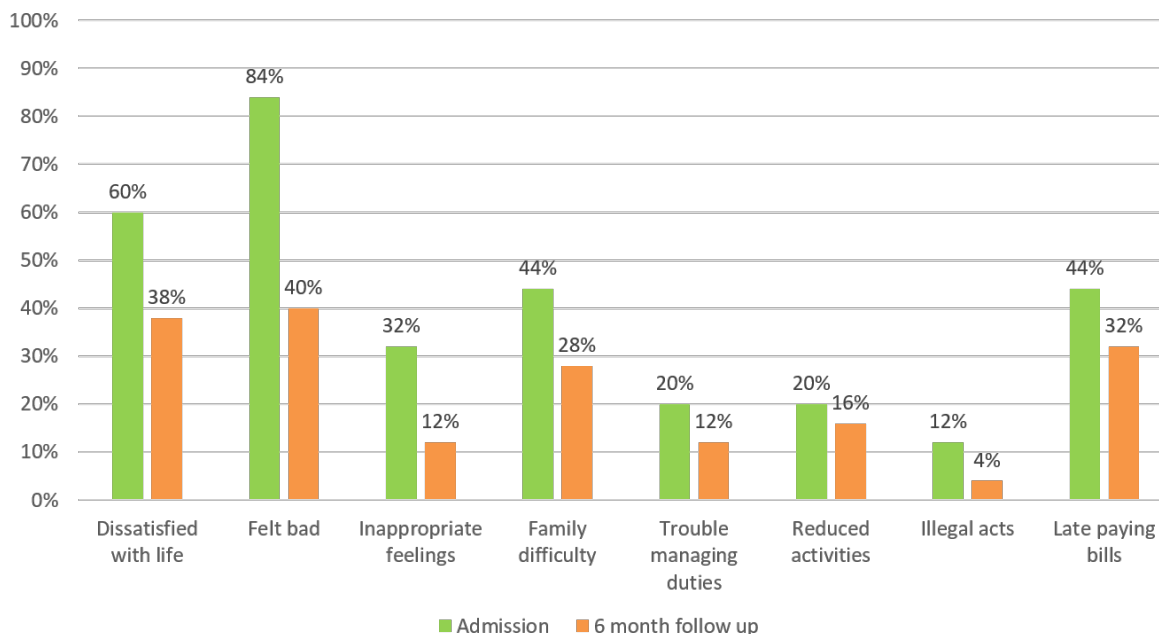
SUMMARY AND CONCLUSIONS

The 2019 IGTO report assess the extent to which problem gambling treatment services provided via the Office of Problem Gambling Treatment and Prevention are associated with positive outcomes for patients who received problem gambling treatment from the Integrated Provider Network (IPN). Because the IPN started its services in January of 2019, this report also reflects the change and the limited amount of data that can be used for the evaluation.

Most of the indicators of process and outcome shown in this report are consistent with the previous years' reports (e.g. treatment reduces the gambling behaviors and improves the psychosocial indicators over time). However, the total number of patients in the system since January to December of 2019 is relatively small. It is clear that IPN will need more time to be fully implemented, and the analysis and the results in the coming years will cover more areas of interest as the data will allow.

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